

## ABSTRACT

A photodetector IC in an optical head device includes a four-segment photodetector (30) and a push-pull signal generator (33). The push-pull signal generator (33) generates a sum signal  $(A+D)$  of radially outer photodetector segments and a sum signal  $(B+C)$  of radially inner photodetector segments. The sum signal  $(B+C)$  is multiplied with a coefficient  $t$  entered from outside and a signal  $((A+D) - t \times (B+C))$  is generated by a subtractor. The signal generated is output as a radial push-pull signal (R-PP). The coefficient  $t$  is a value corresponding to the ratio of the light volume of the outer rim side photodetector segments and the light volume of the inner rim side photodetector segments.